DEFENSE INFORMATION INFRASTRUCTURE (DII)

COMMON OPERATING ENVIRONMENT (COE)

DII COE Version Description Document for

DCE Cell Manager Segment v1.0.0.1 (HPUX Version 10.20)

Version Description Document

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1. System Overview

The DCE Cell Manager is a tool used to administer DCE cells. It is a graphical interface used by cell managers to monitor and control DCE processes and applications. There are three different management tools available within Cell Manager. The first is the Security Manager. This tool is used to administer the security registry. From here the cell manager can add users and groups, change ACLs and control registry policies. The second tool is the Host Configuration Manager. This tool is used to control the various DCE hosts within the cell. From here, one can alter the makeup of the cell. The administrator can add hosts, alter their roles within the cell, promote a slave server to a master. The last tool is the Host Namespace Manager. This tool is used to monitor the host namespace of the DCE cell

2. Reference Documents

- Transarc DCE Introduction
- Transarc DCE Command Reference
- Chisholm Technology's Cell Manager 1.6 Overview and User's Guide
- · Chisholm's Technology's Cell Manager 1.6 Security Manager User's Guide
- Chisholm's Technology's Cell Manager 1.6 Configuration Manager User's Guide

3. Version Description

3.1 Inventory of Materials

- Magnetic Media: Two 8mm tapes consisting of relative tar of the DCE Cell Manager Segment, Version 1.0.0.1/Solaris 2.5.1, May 5, 1997
- Version Description Document Defense Information Infrastructure (DII)
 Common Operating Environment (COE) DCE Cell Manager Segment, Version
 1.0.0.1, May 5, 1997
- Installation Instructions for the DCE Cell Manager Segment v1.0.0.1, May 5, 1997

3.2 Software Changes

Namespace Manager:

- Ability to expand the DFS file system from the junction point in the CDS namespace. The user can use this functionality to easily modify ACLs for multiple DFS entries.
- Ability to examine the CDS namespaces of other cells. The cross-cell relationship between the cells must have already been initialized.

Configuration Manager:

- Ability to view a customized sub-set of hosts in the cell.
- If no customized view has been saved, the only hosts running Security, CDS, and DTS servers initially displayed.

Security Manager:

- Extended Registry Attribute (ERA) support.
- Ability to examine the security registries of other cells. The cross-cell relationship between the cells must have already been initialized.
- "Quick Load" option on the Display Options window. This option will only load the name of the principal in the main window. The end result can be a speed increase of 50x when loading large numbers of users (> 1000).

4. Installation Instructions

Reference the *Installation Instructions for the DCE Cell Manager Segment* v1.0.0.1 for instructions on installing DCE Cell Manager.

5. Known Problems and Errors

General:

- If you receive the following type of error message, contact Chisholm support:

Message <number> not found in catalog.

- If you receive the following type of error message, consult your DCE documentation:

DCE Error: <error message>

If the previous message contains a hex error code, a DCE error message can be provided by executing the following command:

> dcecp -c errtext <hex number>

- Make sure that your available ticket time is sufficiently ample to cover any time-consuming operations you might initiate during your application session. Time-consuming operations include deleting many security or

CDS namespace objects and importing many principals and security groups.

- Depending on your system, closing the window in which you started the Cell Manager or issuing a Ctrl-C in the shell in which you've started the Cell Manager may cause the application to crash.
- Values dated beyond the year 2037 may become corrupted.

Configuration Manager:

- Do not set the Polling Interval in the Tool Options window to a value less than 5 (minutes).
- Polling of the DCE base daemons cannot occur unless the cellmgrd daemon is executing on the remote node. If polling frequently, memory creep may occur on the Agent daemons on the polled nodes.
 In small cells (less than 10 hosts polled), local polling of DCE daemons may be re-enabled. Contact Chisholm Support for further instructions.
- The status for an individual DCE daemon, most commonly dtsd, can potentially be overlooked if the agent does check the state of the daemon between the time when the daemon fails and when the RPC endpoint map is cleaned out by DCE.
- When configuring a host, enter the name of the host in the same format in which it will appear in the /.:/hosts directory. This format is generally the same as the value returned by the "uname -n" command when executed on the host to be configured.
- When creating a Local or Global NTP Time Provider, there is no confirmation that an NTP Time Provider is actually running on the specified remote node.
- Do not use the tool to stop DCE on a host if it is running the only security server in the cell. If you do, you will have to restart DCE on that host using your machine vendor's native scripts. This problem does not occur of you have more than one security server in the cell.
- If while unconfiguring a host you receive a warning indicating that the host is running an additional CDS or Security server, take these steps:
 - 1) Cancel the unconfiguration process for the host.
 - 2) Remove the servers from the host individually using the Remove Additional Servers submenu.
 - 3) Unconfigure the host.

- You may need to manually clean out the /tmp and /opt/cellmgr/local directories. Certain operations may leave log files there.
 Note: Do not remove the /opt/cellmgr/local/dce_type or /opt/cellmgr/local/cellmgr_db file.
- Update Selected will not change the IP address under the circumstance where the NIS maps change. You must shut down the Configuration Manager and restart it to see the new IP address.

Security Manager:

- Importing a large number of users and groups can take a long time and can potentially exhaust system resources since this operation is memory intensive. Also, if your ticket expires during the import, the import operation will not be completed. We suggest that you refresh the ticket prior to importing a large number of users and groups.
- When using the Replica State window, if you receive an error indicating that the replica could not be contacted, click Update All to retrieve the updated information. This is most likely to appear when starting a replica, deleting a read-only replica, or restoring the master server.
- Agent:
- Occasionally monitor memory usage when running Cell Manager for extended periods of time (one week) to ensure that memory creep does not unexpectedly cause problems.
- The rate of memory consumption by the Agent increases with the rate DCE polling by the Configuration Manager.

6. Release Notes

General:

If you run Netscape or any other web browser, it is likely that Cell Manager will not be able to allocate the colors it needs for display purposes. In this case, you have the following options:

- Shut down the web browser, start the Cell Manager applications, then restart the web browser after all applications have started and are ready to begin administration functions.

- Specify that Cell Manager use a private color map. To specify a private color map, as root on the machine, go to the /opt/cellmgr/lib/C directory and edit the files CDSGraf, DCEHost, DCELogin, and DCEUser to change the line containing the string "privateColors" from "False" to "True". Restart the applications to initiate the change.

NOTE: This may cause other applications on the screen to become distorted while the mouse pointer is in the Cell Manager windows. The operation of the other applications will not be effected.

System Requirements:

The following list identifies the required runtime libraries for both Station (GUI) software and the agent (cellmgrd) software.

HP DCE 1.1 shared libraries:

Agent: -ldce -lc -lm

Station: -ldce -lc -lm -lXm -lXmu -lXpm -lXt -lXext -lX11

7. Patch List

None